

# Work Order ID 53912

November 23, 2009 2:44:13 PM



Page 1

Item ID: D3531-1

Accept



Setup Start



Revision ID: A

Stop



Item Name: Bracket

Start Date: 23/11/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 02/12/2009 Req Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

*BP*

Date:

*09-11-23*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3531	Rev A

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3531 ☐ Dwg Rev: A ☐ Prog Rev: A ☐ 2-  
Deburr if necessary

*FB 9-12-9*

*6061  
.040*



110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

*FB 9-12-9*

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

*780912/10*

*(X8) PTD ->*

Dart Aerospace Ltd

W/O: 53912		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
9/12/10	#120	Took Qty +1 Part for QC inspection template	S	09/12/10	1		S 09/12/10

Part No: D3531-1 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng.	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 53912**

November 23, 2009 2:44:13 PM



Page 2

Item ID: D3531-1

Accept



Setup Start



Revision ID: A

Stop



Item Name: Bracket

Start Date: 23/11/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 02/12/2009 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130



NC BRAKE

0.00

Brake NC

Memo

0.00

SB 10/02/22

8

8

Brake NC

Bend as per Dwg D3531

140



QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

8/02/02

(XS)

Quality Control

150



Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Memo

0.00

11 10/03/04

(XV)

Φ

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 23, 2009 2:44:21 PM

Page 1

Work Order ID: 53912

Parent Item: D3531-1RevA

Parent Item Name: Bracket


Comments:

Start Date: 23/11/2009

Required Date: 02/12/2009

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No			100	sf	249.0005	2.3893	3.6		
												
6061-T6 .040 Sheet												

189-12-9

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
MAT	249.0005	
100742	3.3	
102723	5.93	
105842	12	
106747	5.7516	
107461	11.7841	
109396	17.9316	
111224	23.0629	
113004	167.7403	
19380	1.5	

113004

9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	53912
<b>Description:</b> Bracket		<b>Part Number:</b>	D3531-1
<b>Inspection Dwg:</b> D3531 <b>Rev:</b> A		<b>Page</b> 1 of 1	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article      ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.196	+0.005/-0.001	.200	✓			
Ø0.129	+0.005/-0.001	.133	✓			
0.33	+/-0.030	.333	✓			
2.840	+/-0.010	2.840	✓			
1.70	+/-0.030	1.700	✓			
1.45	+/-0.030	1.455	✓			
0.38	+/-0.030	.377	✓			
0.19	+/-0.030	.188	✓			
5.88	+/-0.030	5.883	✓			
12.66	+/-0.030	12.66	✓			
0.600	+/-0.010	.598	✓			
1.77	+/-0.030	1.77	✓			
1.24	+/-0.030	BEND	1.24	✗		
<del>1.16</del>	<del>+/-0.030</del>	<del>BEND</del>				

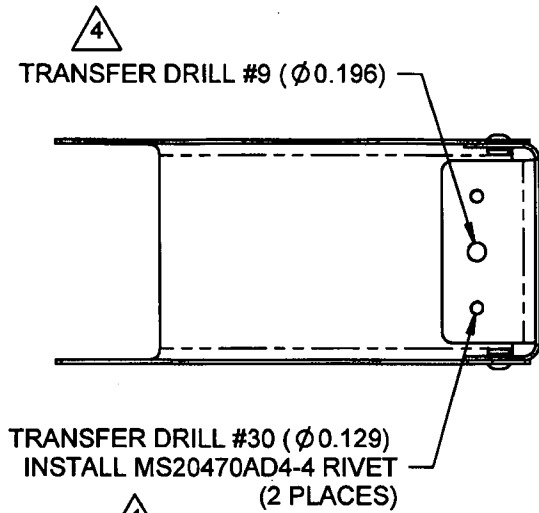
N/S

<b>Measured by:</b>	LB	<b>Audited by:</b>	S	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	9-12-9	<b>Date:</b>	09/12/10	<b>Date:</b>	N/A

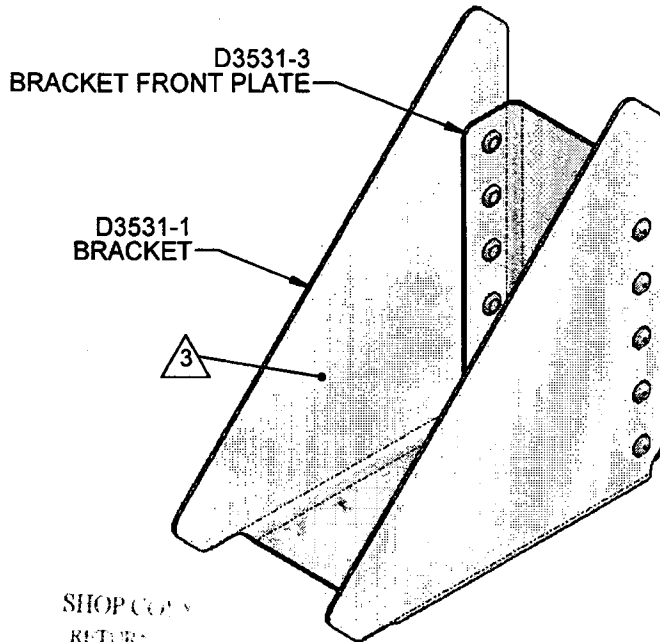
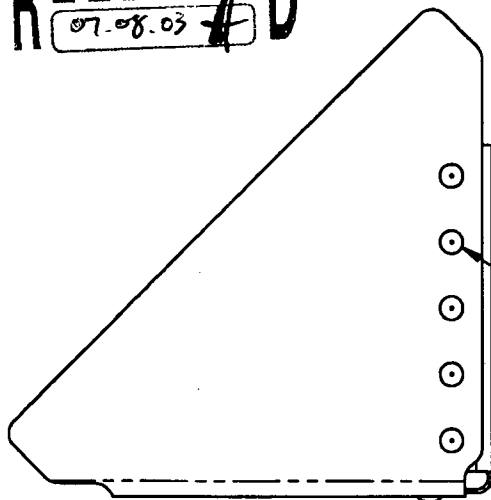
Rev	Date	Change	Revised by	Approved
A	07.10.15	New Issue	KJ/EC/DD	AS



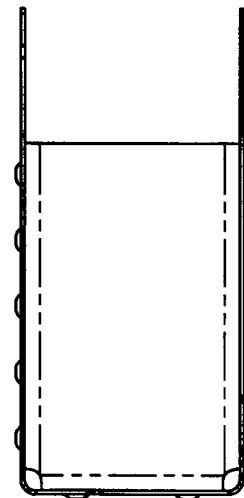
DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D3531	REV. A SHEET 1 OF 3
DATE 07.06.19		TITLE BRACKET ASSEMBLY	SCALE 1:2
REV A	DATE 07.06.19	DESCRIPTION NEW ISSUE	



RELEASED  
07-08-03



SHOP COPY  
RETURNED  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO A NEW  
WORK ORDER  
NO. 53912  
BY 09-11-23



### D3531-041 BRACKET ASSEMBLY

#### NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY BLACK  
SANDTEX (4.3.5.7) PER DART QSI 005 4.3  
ALL PARTS
- 2) ASSEMBLE PER DART QSI 003
- 3) IDENTIFY WITH DART P/N "D3531-041" USING  
WHITE MARKER ON INSIDE OF BRACKET  
ASSEMBLY, WHERE INDICATED
- 4) TRANSFER DRILL HOLES FROM D3531-1 BRACKET  
THROUGH D3531-3 BRACKET FRONT PLATE  
BEFORE FINISHING

#### PARTS LIST

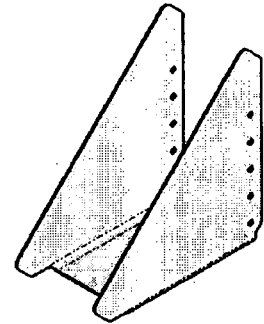
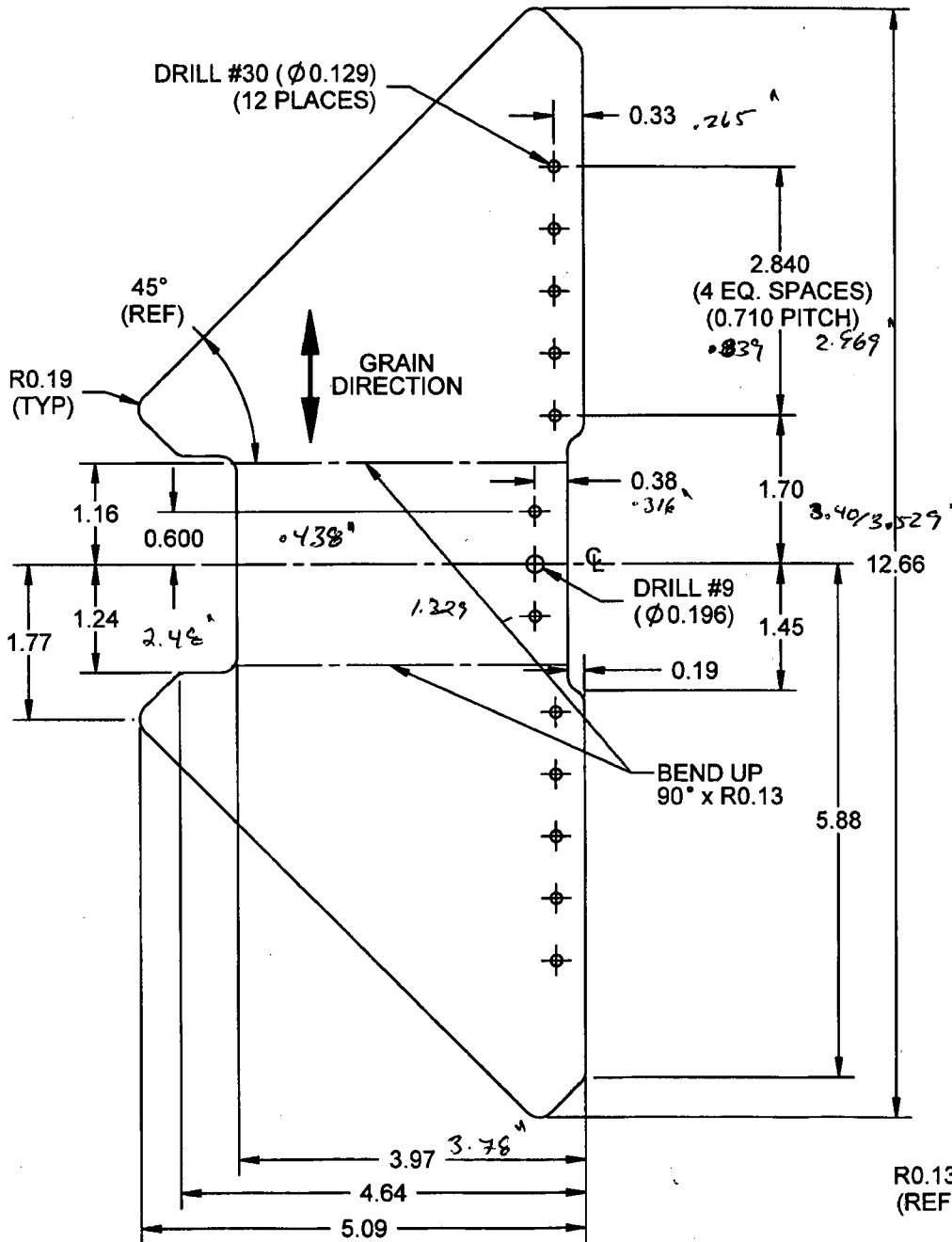
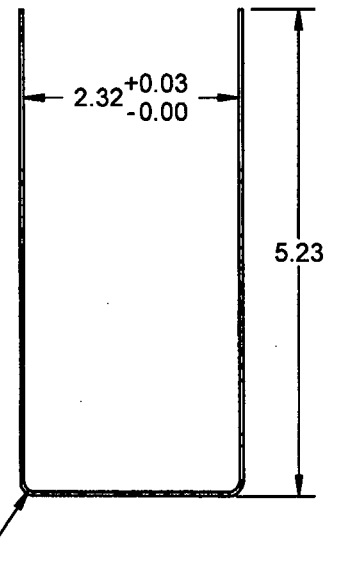
QTY.	P/N	DESCRIPTION
X	D3531-041	BRACKET ASSEMBLY
1	D3531-1	BRACKET
1	D3531-3	BRACKET FRONT PLATE
12	MS20470AD4-4	RIVET

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**DART**

DESIGN <b>CB</b>	DRAWN BY <b>CB</b>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <b>CE</b>	APPROVED <b>HA</b>	DRAWING NO. <b>D3531</b>	REV. A SHEET 2 OF 3
DATE <b>07.06.19</b>	TITLE <b>BRACKET ASSEMBLY</b>		SCALE 1:2

**RELEASED**  
07.08.03**D3531-1F FLAT PATTERN****D3531-1 BRACKET****NOTES:**

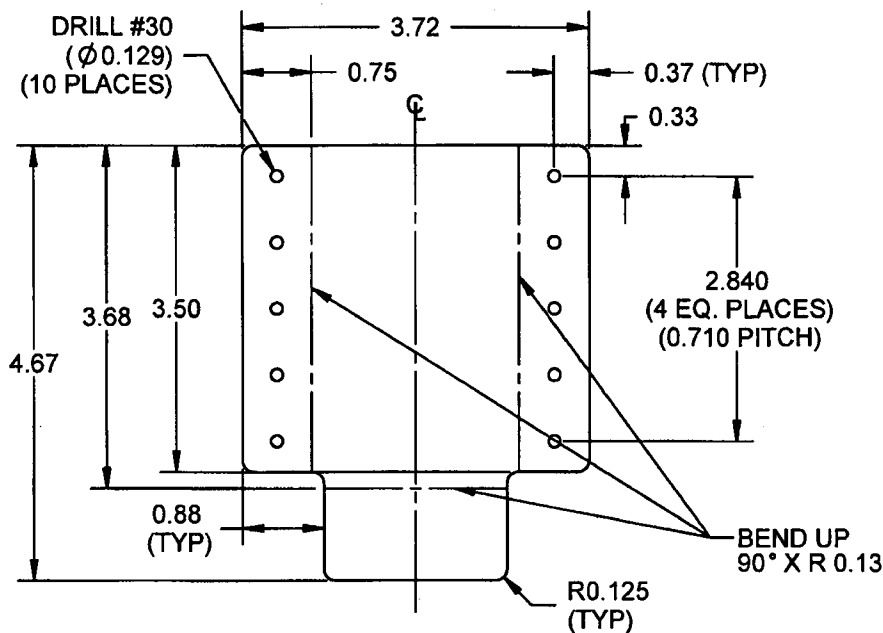
- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT  $\phi$

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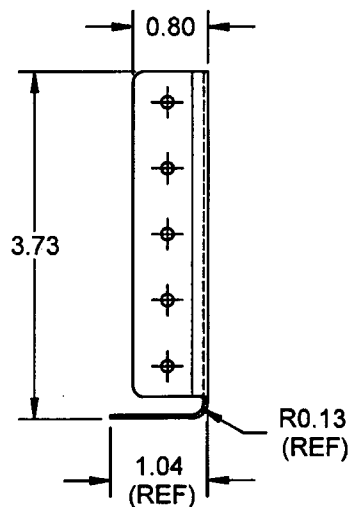
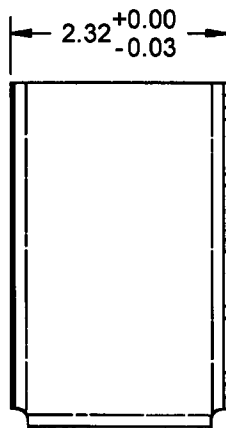
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CHECKED <b>CE</b>	APPROVED <b>#</b>	DRAWING NO. <b>D3531</b>	REV. A SHEET 3 OF 3
DATE <b>07.06.19</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:2



**D3531-3F FLAT PATTERN**



**D3531-3 BRACKET FRONT PLATE**

**NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT CL

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